

REMARKS

The specification has been amended in various places to correct typographical errors.

The claims have been amended to more clearly define the invention as disclosed in the written description. In particular, claims 1, 19, 21 and 22 have been amended for clarity.

The Examiner has rejected claims 1, 2, 5, 7, 11, 14-16 and 18-20 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,731,811 to Rose in view of U.S. Patent 7,899,059 to Ramprashad. The Examiner has further rejected claims 9, 10, 12 and 13 under 35 U.S.C. 103(a) as being unpatentable over Rose in view of Ramprashad, and further in view of U.S. Patent 5,742,343 to Haskell et al. In addition, the Examiner has rejected claims 17 and 21-25 under 35 U.S.C. 103(a) as being unpatentable over Rose in view of Ramprashad, and further in view of U.S. patent 7,274,661 to Harrell et al.

Claim 1 claims:

"A method for providing heterogeneous layered video support, comprising the acts of:

constructing signaling information defining how at least two layers (BS, ES) are to be combined at a decoder; and

transmitting the signaling information along with the at least two layers (BS, ES) in a transport stream to the decoder,

wherein said signaling information is constructed as a plurality of parameter lists,

wherein each of said plurality of parameter lists define a unique quality of service (QOS) of said transport stream,

and wherein one of said parameter values defines, for a corresponding layer, a DC compensation."

The Rose patent discloses a scalable predictive coding method and apparatus.

The Ramprashad patent discloses media delivery using quality of service differentiation within a media stream.

Claim 1(along with independent claims 5 and19) includes the limitation "wherein one of said parameter values defines, for a corresponding layer, a DC compensation."

Applicants submit that a review of both Rose and Ramprashad shows no mention or suggestion of "DC compensation" or DC offset.

Applicant therefore believe that claims 1, 2, 5, 7, 11, 14-16 and 18-20 are patentable thereover.

Claim 9 includes the limitation "wherein at least two of said parameter values define, for a corresponding layer, horizontal FIR coefficients for to a filtering operation required to combine the corresponding layer with a reference layer", while claim 10 include the limitation "wherein at least two of said parameter values define, for a corresponding layer, vertical FIR coefficients for a filtering operation required to combine the corresponding layer with a reference layer".

Claim 12 includes the limitation “wherein a ratio of two of said parameter values defines, for a corresponding layer, a horizontal scaling factor”, while claim 13 includes the limitation “wherein a ratio of two of said parameter values defines, for a corresponding layer, a vertical scaling factor”.

The Haskell et al. patent discloses a scalable encoding and decoding of high-resolution progressive video.

The Examiner has indicated that “the combination of Rose and Ramprashad is silent about defining horizontal and vertical FIR coefficients for a filtering operation as specified” and that “Haskell provides a method for providing heterogeneous layered video including defining horizontal and vertical FIR coefficients for a filtering operation (See Haskell col. 5, lines 1-7, col. 7, lines 63-67, col. 8, lines 1-11).

With regard to claims 9 and 10, Applicants submit that the Examiner is mistaken. In particular, while Haskell et al. discloses the use of a finite-impulse-response (FIR) temporal filter, Haskell et al. is silent with regard to any coefficients needed for such a filter, and that such coefficients should be included in signal information sent with the at least two layer signals. Further, Haskell et al. does not supply that which is missing from Rose and Ramprashad as noted above.

With regard to claims 12 and 13, Applicants would like to note that these claims are related to horizontal and vertical scaling factors and not to FIR filters. As such, Applicants believe that the Examiner’s rejection thereof based on Rose/Ramprashad/Haskell et al. is erroneous.

Claim 17 claims "The method as claimed in Claim 5, wherein one of said parameters defines whether a corresponding layer contains one of an interlaced or progressive video stream."

The Harrell et al. patent discloses a flow control method for quality streaming of audio/video/media over packet networks.

The Examiner has conceded that "the combination of Rose and Ramprashad is silent about providing heterogeneous layered video wherein one of the parameters defines whether a corresponding layer contains one of an interlaced or progressive stream", and then adds "Harrell provides a method for providing layered video support wherein one of the parameters defines whether a corresponding layer contains one of an interlaced or progressive stream (See Harrell col. 5, lines 1-7 and col. 6, lines 2-16)."

Applicants believe that the Examiner is mistaken. In particular, Harrell et al. does not distinguish between interlaced or progressive video streams, and whether the signal information should include such a definition. In fact, Harrell et al. does not even mention the term "interlaced", and only mentions the term "progressive" at col. 15, line 7 as in "Progressive Fine Granularity Scalable (PFGS) coding". Hence, Applicants submit that the combination of Rose, Ramprashad and Harrell et al. does not render claim 17 obvious.

Claims 21-25 relate to the transmission of the two layers and the signaling information over Internet protocol, where the signaling information is transmitted either in-band or out-of-band.

The Examiner has indicated that "Harrell provides a method for providing layered video support including transmitting the layers (BS ES) over Internet Protocol using real-time transport protocol while the transmission session is performed either in-band or out-of-band (See Harrell col. 4, lines 23-37)."

Applicants submit that the Examiner is mistaken. While Harrell et al. arguably discloses transmission of video information over Internet protocol, there is no disclosure or suggestion of the signaling information being transmitted either in-band or out-of-band. Further, Applicants submit that Harrell et al. does not supply that which is missing from Rose and Ramprashad.

In view of the above, Applicants believe that the subject invention, as claimed, is not rendered obvious by the prior art, either individually or collectively, and as such, is patentable thereover.

Applicants believe that this application, containing claims 1, 2, 5, 7 and 9-25, is now in condition for allowance and such action is respectfully requested.

Respectfully submitted,

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